

Trend Study 20-3-98

Study site name: Mountain Home Seeding .

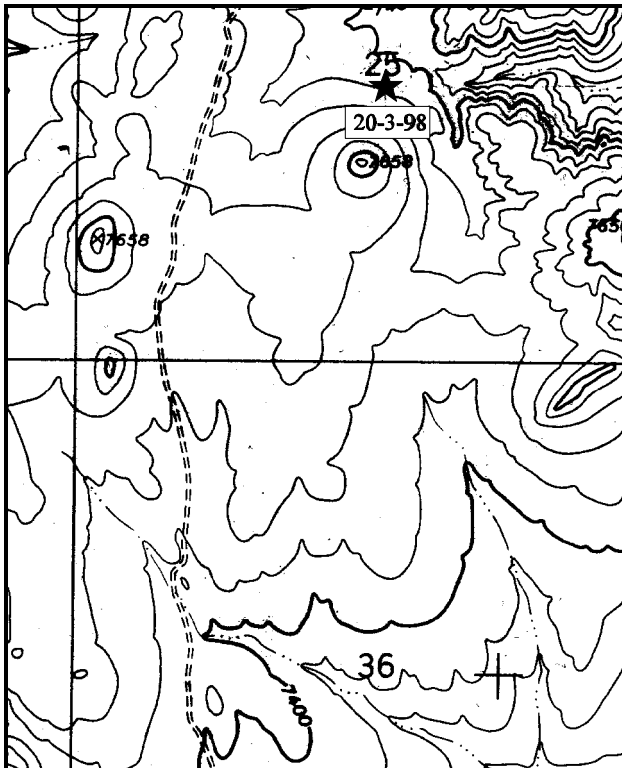
Range type: Burn

Compass bearing: frequency baseline 180 M degrees.

Footmark (first frame placement) 5 feet. Frequency belt placement; line 1 (11ft), line 2 (34ft), line 3 (59ft), line 4 (71ft), line 5 (95ft).

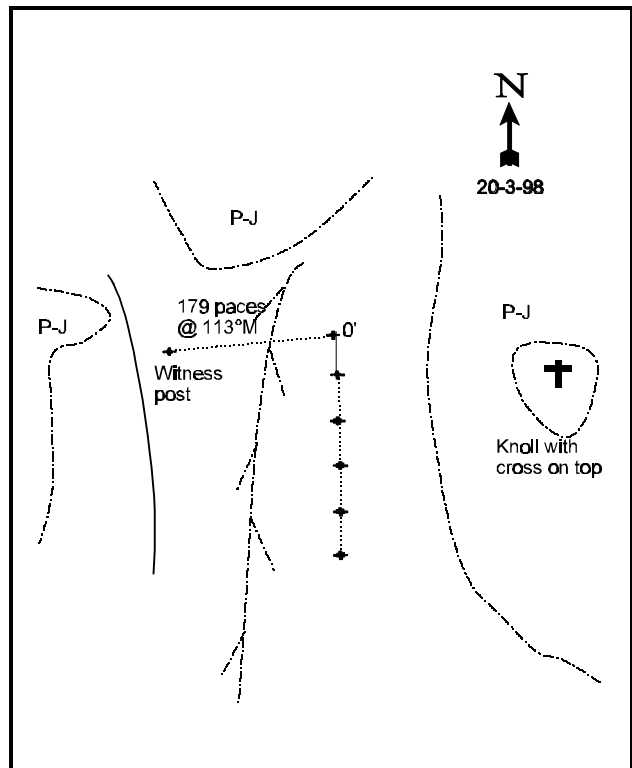
LOCATION DESCRIPTION

From the Indian Peaks cabin drive to the main Pine Valley Road. Turn left (north) and drive about 2 miles to a fork which is labeled with a sign saying "Hamblin Valley Road 15 miles." Drive west on this road avoiding side roads about 12 miles to a four-way intersection. The sign reads "Lopers Spring 6.0 miles" to the north. Turn right (north) and drive 6.0 miles to a witness post on the right side of the road. (You will pass another 4 way intersection at about 3.7 miles.) The 0-foot stake is 170 paces from the witness post at 113° magnetic.



Map Name: Lopers Spring , Utah

Township 27S , Range 19W , Section 25



Diagrammatic Sketch

UTM 4257365.708 N, 244882.593 E

DISCUSSION

Trend Study No. 20-3

The Mountain Home Seeding is a new trend study established in 1998 on a burned and chained pinyon-juniper area. It has a west, northwest aspect with a gentle slope which varies from 3% to 7%. Elevation is about 7,400 feet. This treatment area is used heavily by wild horses and moderately by elk. The site is available most of the year. Escape and thermal cover are available at the edge of the treatment about 200 feet east of the study site baseline. Pellet group data from the site estimate 55 horse, 27 elk, and 7 deer days use/acre. Some of the elk sign was recent with the study site being read on June 9th, 1998.

Soil at the site is moderately shallow with an effective rooting depth (see methods) of just over 12 inches. Soil texture is a sandy loam with a slightly acid pH (6.3). Rock and gravel sized pavement is common on the surface and throughout the profile. There is some localized soil movement occurring on the site, although it does not appear to be a problem at this time.

A few mountain big sagebrush and resprouting rabbitbrush were encountered, with most shrubs being eliminated by the fire. None of the shrubs appeared to be utilized. Dead pinyon and juniper stumps numbered approximately 80/acre.

The site is dominated by seeded grasses, primarily crested wheatgrass, which provides 84% of the grass cover. Smooth brome and intermediate wheatgrass are also fairly common. All grasses combined produce 30% cover. Forbs are fairly diverse, but not abundant with 12 species producing less than 1% cover. The most common forb is the seeded alfalfa which provides 35% of the forb cover. This forb appeared to be heavily utilized.

1998 APPARENT TREND ASSESSMENT

The soil appears to have been stabilized by the treatment. Herbaceous cover is abundant and well dispersed. There are few shrubs on the site. Establishment of a significant shrub population will take many years in the thick herbaceous cover unless they are inter-seeded. Seeded perennial grasses are well established and should remain so as long as the site is not severely overgrazed. However, the composition is poor with crested wheatgrass dominating the site. Forbs are also limited.

HERBACEOUS TRENDS --

Herd unit 20 , Study no: 3

Type	Species	Nested Frequency '98	Quadrat Frequency '98	Average Cover % '98
G	Agropyron cristatum	352	97	25.30
G	Agropyron intermedium	34	13	.90
G	Aristida purpurea	5	1	.15
G	Bromus inermis	115	48	3.25
G	Bromus tectorum (a)	84	27	.65
G	Sitanion hystrix	3	2	.03
Total for Annual Grasses		84	27	0.64
Total for Perennial Grasses		509	161	29.64

T y p e	Species	Nested Frequency '98	Quadrat Frequency '98	Average Cover % '98
	Total for Grasses	593	188	30.29
F	Astragalus spp.	1	1	.00
F	Collinsia parviflora (a)	11	6	.03
F	Cymopterus spp.	34	13	.11
F	Descurainia pinnata (a)	2	1	.03
F	Gilia spp. (a)	25	12	.08
F	Lappula occidentalis (a)	5	2	.01
F	Lupinus argenteus	3	1	.00
F	Lygodesmia spinosa	1	1	.03
F	Medicago sativa	7	6	.22
F	Microsteris gracilis (a)	24	11	.05
F	Phlox longifolia	1	1	.00
F	Sphaeralcea coccinea	2	1	.03
	Total for Annual Forbs	67	32	0.21
	Total for Perennial Forbs	49	24	0.41
	Total for Forbs	116	56	0.62

BROWSE TRENDS --

Herd unit 20 , Study no: 3

T y p e	Species	Strip Frequency '98	Average Cover % '98
B	Artemisia tridentata vaseyana	0	-
B	Chrysothamnus parryi howardi	0	.38
B	Juniperus osteosperma	0	-
B	Pinus monophylla	0	-
	Total for Browse	0	0.38

BASIC COVER --

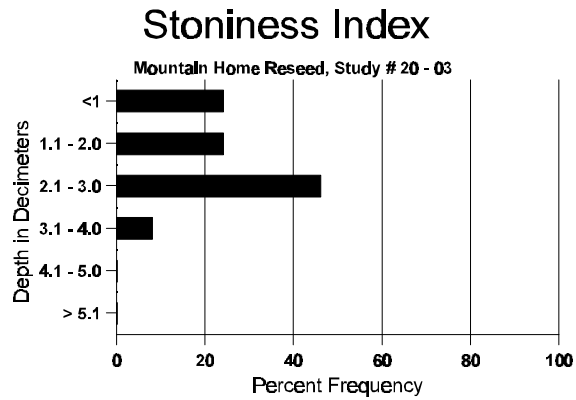
Herd unit 20 , Study no: 3

Cover Type	Nested Frequency '98	Average Cover % '98
Vegetation	409	35.65
Rock	301	13.67
Pavement	417	23.51
Litter	493	42.54
Cryptogams	10	.04
Bare Ground	353	15.58

SOIL ANALYSIS DATA --

Herd Unit 20, Study # 03, Study Name: Mountain Home Reseed

Effective rooting depth (inches)	Temp °F (depth)	pH	%sand	%silt	%clay	%OM	PPM P	PPM K	dS/m
12.2	37.0 (13.4)	6.3	70.0	15.1	14.9	2.1	21.5	163.2	.6



PELLET GROUP FREQUENCY --

Herd unit 20 , Study no: 3

Type	Quadrat Frequency '98
Rabbit	5
Horse	30
Elk	27
Deer	14

BROWSE CHARACTERISTICS --

Herd unit 20 , Study no: 3

A Y G R E	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches)		Total
	1	2	3	4	5	6	7	8	9	1	2	3	4		Ht. Cr.		
Artemisia tridentata vaseyana																	
M 98	-	-	-	-	-	-	-	-	-	-	-	-	-	0	30	40	0
% Plants Showing '98		<u>Moderate Use</u> 00%			<u>Heavy Use</u> 00%			<u>Poor Vigor</u> 00%			<u>%Change</u>						
Total Plants/Acre (excluding Dead & Seedlings)											'98		0	Dec:		-	
Chrysothamnus parryi howardi																	
M 98	-	-	-	-	-	-	-	-	-	-	-	-	-	0	35	48	0
% Plants Showing '98		<u>Moderate Use</u> 00%			<u>Heavy Use</u> 00%			<u>Poor Vigor</u> 00%			<u>%Change</u>						
Total Plants/Acre (excluding Dead & Seedlings)											'98		0	Dec:		-	

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.	Total
		1	2	3	4	5	6	7	8	9	1	2	3	4			
Juniperus osteosperma																	
X	98	-	-	-	-	-	-	-	-	-	-	-	-	-	40		2
% Plants Showing '98		<u>Moderate Use</u> 00%			<u>Heavy Use</u> 00%			<u>Poor Vigor</u> 00%			<u>%Change</u>						
Total Plants/Acre (excluding Dead & Seedlings)														'98	0	Dec:	-
Pinus monophylla																	
X	98	-	-	-	-	-	-	-	-	-	-	-	-	-	40		2
% Plants Showing '98		<u>Moderate Use</u> 00%			<u>Heavy Use</u> 00%			<u>Poor Vigor</u> 00%			<u>%Change</u>						
Total Plants/Acre (excluding Dead & Seedlings)														'98	0	Dec:	-